

REMARKS

Claims 1-3, 6, 12-14 and 24 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Boettger (U.S. Patent Number 6,625,132) and claims 1-6, 11-17 and 22-24 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Sagi (U.S. Patent Application Publication Number 2004/0264410). Respectfully disagreeing with these rejections, reconsideration is requested by the applicants.

Independent claim 1 recites (emphasis added) "A wireless communication unit comprising...a controller...operable, responsive to the call initiation and **when the wireless communication unit is operating in the second wireless communication network, to selectively hairpin the call through the first communication network.**" Independent claim 12 recites (emphasis added) "**automatically selectively hairpinning the call through a first communication network when the call is being originated in a second communication network and the call is terminating at the second communication network.**" The Examiner asserts that both Boettger and Sagi anticipate this claim language; however, the applicants respectfully disagree.

Boettger Fig. 1, column 11 lines 1-9 and 24-35, and column 17 lines 24-43 are cited as teaching this claim language. Boettger column 11 lines 1-9 reads:

The mobile station includes an antenna 651 coupled, tunable a radio frequency (RF) transceiver 652 coupled to the antenna 651, a CDMA spreader/despreader 654, an analog modulator/demodulator 656, processing circuitry 658, a user interface 660 and memory 662 (these components are coupled as illustrated or in another similar fashion). Stored in memory are the thresholds 664 and available systems information 666 previously discussed with regard to the present invention.

Boettger column 11 lines 24-35 reads:

As will be understood, the tunable RF transceiver 652 allows the mobile station to tune to carriers at differing frequencies. The tunable RF transceiver 652 may be a single frequency nimble unit or may be a plurality of RF units, each of which operates at one or more RF frequencies. Further, by having both the CDMA spreader/despreader circuitry 654 and the analog modulator/demodulator circuitry 656, the mobile station may operate in both CDMA and analog systems, e.g., AMPS. Thus, upon system reselection, based

upon the available systems information 666, the mobile station may seek other CDMA systems and/or analog systems.

Boettger column 17 lines 24-43 reads:

In this state, the mobile station monitors the Paging Channel. The mobile station can receive messages, receive an incoming call (mobile station terminated call), initiate a call (mobile station originated call), cancel a PACA call, initiate a registration, or initiate a message transmission.

[...]

While in the Mobile Station Idle State, the mobile station shall perform the following procedures:

[...]

The mobile station shall perform idle handoff procedures as specified in 6.6.2.1.4.

The mobile station shall perform system reselection procedures as specified in 6.6.2.1.6.

[...]

6.6.2.1.6 System Reselection Procedures

The mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a system reselection indication (see 6.6.1.1) if the following are true:

The Examiner appears to be asserting that mobile station handoff and/or reselection somehow teaches the claim language of claims 1 and 12. However, it is unclear to the applicants how mobile station handoff and/or reselection in the cited portions of Boettger teach or suggest what is claimed in claims 1 and 12. Again, claim 1 recites (emphasis added) "A wireless communication unit comprising...a controller...operable, responsive to the call initiation and **when the wireless communication unit is operating in the second wireless communication network, to selectively hairpin the call through the first communication network.**" Independent claim 12 recites (emphasis added) "**automatically selectively hairpinning the call through a first communication network when the call is being originated in a second communication network and the call is terminating at the second communication network.**"

For example, the applicants fail to see how the cited portions of Boettger teach or suggest hairpinning a call from a second communication network through a first communication network. FIG. 1 of the present application may be referenced as an example of hairpinning a call from a second communication network through a first

communication network. Page 11 line 24 – page 12 lines 1-14 of the present application reads:

One approach alluded to above that can be used in this example is hairpinning the call through the first network or WLAN as further suggested by FIG. 1. Wireless communication unit 101' initiates or originates a call 131 that will be coupled via the associated BTS 125 to the MSC 121. Note this call can be intended for another communications unit, such as the wireless communication unit 103 or the POTS 109 as depicted by the dashed call flow lines 133, 133'.

In this instance, advantageously, the communication unit has elected to and then automatically and selectively hairpinned the call through the first network 104 as shown by call flow lines 135, 137, 137' (note that 137' would actually go through the MSC and then back to unit 103). This is accomplished by substituting for the target number (WAN number of wireless communication unit 103, or PSTN number of POTS 109) a hairpin number that terminates at or on the first network 104 or controller and then transferring information corresponding to the number of the target unit to the first network 104. The first network or WLAN 104 then places a call to the target unit, e.g. 137 or 137' and connects the call legs 135 and 137, 137' together.

Thus, the applicants submit that the cited portions of Boettger fail to teach or suggest all of what is claimed in claims 1 and 12.

Sagi [0023, 0038, and 0039] are cited as teaching the language of claims 1 and 12. These Sagi paragraphs read (emphasis added):

[0023] Accordingly, the WLAN receiver and transmitter 203, 207 and the WAN receiver and transmitter 204, 208 as controlled by and in cooperation with the controller and functions thereof provide the communication unit 10 with dual operating mode capability. More particularly, the communication unit 10 is capable of registering with and obtaining service from a cellular WAN provided by or via, for example, the cellular system and corresponding BTS 14 as well as a WLAN 11 as provided by the enterprise server 12. However, the communication unit 10 can optionally have only one receiver and transmitter that are suitable for and adaptable for interfacing with both a cellular WAN and a WLAN.

[0038] Referring to FIG. 4, the methodology or operation of the communication unit 10 and enterprise server 12 for providing a hand off from the WLAN 11 (or initial network) to the WAN (or second network) will be discussed. In this scenario, the communication unit 10 initiates a call to a target communication unit while the communication unit 10 is within the WLAN 11 and later moves out of the WLAN 11. The target communication unit is depicted by 499 in FIG. 4, but it may be any of communication units 18, 22, 26, 34 shown in FIG. 1.

[0039] The methodology begins at 402 when the communication unit 10 initiates a call to the target communication unit 499. The MA 225 determines that the communication unit 10 should use the WLAN 11. This determination may be done by the WLAN receiver 203 receiving a signal from the enterprise server 12 via one of the access points 13 and forwarding the signal to the controller 205. The MA 225 generates a SIP message for sending to the target communication unit 499. The SIP message includes an invite signal as well as an acknowledgement request. The SIP message is depicted as INVITE (TARGET NUMBER)/200 OK/ACK in FIG. 4. The controller 205 forwards this SIP message to the WLAN transmitter 207, which sends it to the enterprise server 12 via one of the access points 13.

However, in contrast to Sagi, claim 1 recites (emphasis added) "A wireless communication unit comprising...a controller...operable, responsive to the call initiation and when the wireless communication unit is operating in the second wireless communication network, to selectively hairpin the call through the first communication network." Also, claim 12 recites (emphasis added) "automatically selectively hairpinning the call through a first communication network when the call is being originated in a second communication network and the call is terminating at the second communication network." It is unclear to the applicants how Sagi [0023, 0038, and 0039] teach or suggest the language of claims 1 and 12.

As an example and as discussed above with respect to Boettger, the applicants fail to see how the cited portions of Sagi teach or suggest hairpinning a call from a second communication network through a first communication network. Again, the applicants refer the Examiner to FIG. 1 and the passage quoted from the present application above for an example of hairpinning through a communication network. Thus, the applicants submit that the cited portions of Sagi fail to teach or suggest all of what is claimed in claims 1 and 12.

Independent claim 24 recites (emphasis added) "A network controller operable to facilitate **hairpinning calls from a wireless communication unit**, the network controller comprising...a controller, coupled to the switching function and comprising an associated memory, **operable to provide hairpin information to the wireless communication unit.**" Sagi Fig. 3 (enterprise server controller 305), Sagi Fig. 2 (communication unit controller 205) and Sagi [0025, 0026, 0033, and 0042] are cited as teaching the language of claim 24. These Sagi paragraphs read:

[0025] The controller 205 is essentially a general purpose processor and, preferably includes a voice and data processor 221 coupled to an associated memory 223. The voice and data processor 221 is, preferably, a known processor based element with functionality that will depend on the specifics of the air interface with the WLAN and the cellular WAN as well as various network protocols for voice and data traffic. The processor 221 will operate to encode and decode voice and data messages to provide signals suitable for a transducer or further processing by the controller 205. The processor 221 may include one or more microprocessors, digital signal processors, and other integrated circuits depending on the responsibilities of the controller 205 with respect to signal processing duties that are not here relevant. In any event the controller 205 also includes the memory 223 that may be a combination of known RAM, ROM, EEPROM or magnetic memory.

[0026] The memory source or memory 223 is used to store among various other items or programs etc., a mobility agent (MA) 225 generally for, in conjunction with entities at the enterprise server 12, facilitating a seamless handover between different networks. More particularly, the MA 225 is for generating session initiation protocol (SIP) messages that include hand off requests and registration requests and for facilitating handoffs between an initial network and a second network. The memory 223 also includes an operating system 227 as is known, a public number 229 used primarily when communicating via the enterprise server 12 over the WLAN 11, over the PSTN 20 or over the cellular network 30, a private number 231 used primarily when communicating over the cellular WAN and a dual mode operation routine 233 for permitting the communication unit 10 to communicate with different networks.

...
[0033] The memory source or memory 311 is used to store among various other items or programs etc., applications 313 for providing a plurality of users with WLAN service, an operating system 315 for permitting administrative control, an Internet Protocol private branch exchange (IP PBX) 317, a session initiation protocol (SIP) gateway 319, a SIP registrar 321, and an SIP proxy 323. The (SIP) gateway 319 may use and control a separate Media Gateway (not shown) for the transport of the voice data associated with calls. The memory 311 includes various other routines 325 that are too numerous to mention but that will be evident to one of ordinary skill given a specific server task, etc. The reader will appreciate that this listing is merely a brief listing of exemplary routines that will be required or advantageous in effecting the WLAN 11 and that other optional applications may be stored in the memory 311 that have not been mentioned. The SIP entities 319, 321, 323 generally serve as a signaling protocol to create, modify and terminate voice over Internet Protocol conversation between users within the WLAN 11. The SIP entities 319, 321, 323 and the IP PBX 317 will be discussed more fully below.

...
[0042] At 408, the communication unit 10 begins to move outside the WLAN 11. The MA 225 determines that the communication unit 10 should switch from the WLAN (initial network) to the WAN provided by the cellular BTS 14. This determination may be done by the WAN receiver 204 receiving a signal from the cellular BTS 14 and forwarding it to the controller 205.

However, Sagi [0025 and 0026], which describe the communication unit controller 205, are cited as teaching a controller operable to provide hairpin information to the wireless communication unit. Since the wireless communication unit is the same unit from which calls are being hairpinned, the applicants submit that communication unit controller 205 cannot be said to be operable to provide hairpin information to the wireless communication unit itself.

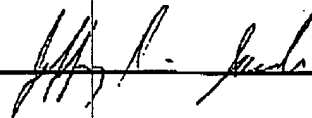
In addition, claim 24 describes a controller operable to provide hairpin information to the wireless communication unit. However, the applicants submit that hairpin information is not taught or suggested in Sagi [0025 and 0026]. Furthermore, the enterprise server controller 305 is cited as teaching the switching function of claim 24. Thus, the network controller of claim 24 (which comprises a switching function and a controller) is asserted to be taught by some aspects of enterprise server controller 305 and some aspects of communication unit controller 205. Therefore, the applicants submit that the cited portions of Sagi fail to teach or suggest all of what is claimed in claim 24.

Since none of the references cited, either independently or in combination, teach all of the limitations of independent claims 1, 12 or 24, or therefore, all the limitations of their respective dependent claims, it is asserted that neither anticipation nor a prima facie case for obviousness has been shown. No remaining grounds for rejection or objection being given, the claims in their present form are asserted to be patentable over the prior art of record and in condition for allowance. Therefore, allowance and issuance of this case is earnestly solicited.

The Examiner is invited to contact the undersigned, if such communication would advance the prosecution of the present application. Lastly, please charge any additional fees (including extension of time fees) or credit overpayment to Deposit Account No. 502117 -- Motorola, Inc.

Respectfully submitted,
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By: _____



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